Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matters of	)	
	)	
Deployment of Wireline Services Offering Advanced Telecommunications Capability	)	CC Docket No. 98-147
	)	
and	)	
	)	
Implementation of the Local Competition Provisions of the Telecommunications Act of 1996	)	CC Docket No. 96-98

COMMENTS OF ALLEGIANCE TELECOM, INC.

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SUMMARY

This proceeding provides an opportunity for the Commission to promote the pro-competitive goals of the Act in the context of ILEC deployment of next generation architectures As a first step, the Commission should put in place adequate safeguards to ensure that ILECs do not deploy next generation networks in ways that will thwart competition. The Commission should require ILECs to maintain copper loops and to offer voice loops over integrated DLC systems. The Commission should also update network disclosure rules so that CLECs and regulators are informed of the full capabilities of new network technologies, not just what capabilities ILECs choose to activate.

The Commission should also define loop and transport UNEs as including advanced services equipment. The Commission's original exclusion essentially of any ILEC equipment that was used in provision of advanced services, even if used for other services, has been shown to be unworkable by SBC's request for waiver of the SBC/Ameritech merger conditions in connection with Project Pronto. The Commission should also make clear that an ILEC's obligation to offer all of the features, functions, and capabilities of the network as new UNEs fully applies to new optical loops and network facilities. At a minimum, the Commission should require ILECs to offer as UNEs and as subloop elements optical wavelengths and virtual paths between the central office and the customer's premises.

On remand from the D.C. Circuit, the Commission may, and should, establish a regulatory framework that will require ILECs to provide CLECs full parity in terms of access to, and use of,

ILEC central offices. The Commission should interpret "necessary" in a way that will promote the pro-competitive goals of the Act. More concretely, the Commission should define "equipment necessary for interconnection or access to UNEs" as encompassing any equipment that "enables" interconnection or access to UNEs. In addition, as more functionality is included in loops, additional functionality in CLEC equipment is necessary for interconnection and access to UNEs so that CLECs may offer advanced services comparable to and competitive with those offered by the ILECs. The Commission should determine that the functions performed by contemporary equipment that interacts with packetized information, such as ATM "switches" and routers, are not "switching functions" that ILECs view as separate from interconnection and access to UNEs and, therefore, not eligible for collocation. Collocation of this type of equipment is necessary because the economic barriers that would be established by requiring CLECs to separately establish offices for this equipment, in addition to collocation space, would thwart achievement of the competitive goals of the Act. The Commission should also require that ILECs permit collocation of multifunction and separate packet processing equipment as a reasonable condition of providing collocation generally because under the Act, ILECs must offer physical collocation "on rates, terms, and conditions that are just, reasonable, and nondiscriminatory."

The Commission may, and should, reestablish the requirement that ILECs permit CLECs to perform their own cross-connects with other CLECs on ILEC premises, and should require that ILECs provide this cross-connection as a new UNE to the extent it is not already required

under existing UNE rules. It would create formidable practical and economic barriers to competition to deny CLECs the ability to provision their own cross-connections. As with collocation of multifunction equipment, the Commission may require ILECs to permit CLEC self-provisioned cross-connection as a reasonable condition of offering collocation. Any additional physical occupation of ILEC premises is trivial, and CLEC cross-connection greatly facilitates achievement of the pro-competitive goals of the Act.

The Commission should also establish minimum collocation intervals for the full range of physical collocation arrangements provided by ILECs, including 30 days for augmenting existing collocation space; require ILECs to provide collocation space at remote terminals; disclose information concerning deployment of remote terminals; facilitate line sharing by permitting CLECs to collocate splitters; and establish national space reservation requirements for ILEC central offices.

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Provisions of the	)	
Telecommunications Act of 1996	)	

COMMENTS OF ALLEGIANCE TELECOM, INC.

Allegiance Telecom, Inc. ("Allegiance") submits these comments in response to the Commission's notices of proposed rulemaking[1] in the above-captioned proceedings concerning issues raised on remand[2] of the *Collocation Order*[3] and concerning the need for revision of the

[1] *In the Matters of Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket Nos. 98-147, 96-98, Order on Reconsideration and Second Further Notice of Proposed Rulemaking in CC Docket No. 98-147, and Fifth Further Notice of Proposed Rulemaking in CC Docket No. 96-98, FCC 00-297 (August 10, 2000)("*Collocation Reconsideration Order and NPRM*").

[2] *GTE Service Corp v. FCC*, 205 F.3d 416 (D.C. Cir. 2000)("*GTE v. FCC*").

[3] *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, First Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 98-147, 14 FCC Rcd 4761 (1999)("*Collocation Order*"), *aff'd in part and remanded in part sub.*

Commission's local competition rules in light of deployment of next generation network architecture by incumbent local exchange carriers ('ILECs").

I. ILEC DEPLOYMENT OF NEXT GENERATION NETWORK ARCHITECTURES REQUIRES NEW COMPETITIVE SAFEGUARDS

A. ILECs Should Be Required to Offer and Maintain Copper Loops

The Commission seeks comment on the impact the deployment of next generation digital loop carrier ("NGDLC") systems will have on copper facilities, *i.e.*, what will happen to these copper facilities when the NGDLC is deployed as an overlay of existing copper facilities. The Commission needs to ensure that these copper facilities are maintained so that they provide a viable alternate means for CLECs to access customers. The importance of these facilities has been by no means lessened by the NGDLC architecture, and in some cases, their importance has been heightened, particularly for those CLECs whose business plans are focused on the use of copper facilities. In addition, end users will be disadvantaged as a result of the restricted availability of competitive alternatives if the Commission does not act to preserve copper facilities.

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nom. GTE v. FCC, supra.

One of the main reasons this Commission unbundled the subloop element was to facilitate CLEC access to customers in an integrated digital loop carrier ("IDLC") system environment.[4] While technology has increased the possible ways for CLECs to access IDLC customers,[5] ILEC deployment of the NGDLC architecture, and the restrictions the ILECs have imposed, ensure that CLECs will still have difficulties accessing their customers under the NGDLC architecture. Maintaining existing copper facilities in the subloop will give CLECs more options in providing such access and will directly benefit end users by increasing the availability of competitive choice.

As discussed below, the lack of collocation space for CLEC DSLAMs in many NGDLC remote terminals coupled with interoperability issues with line cards could effectively preclude a CLEC's ability even to access its customers, much less to provide the services it seeks to offer to its customers.

In addition to addressing the CLEC access issues, the continued use of copper facilities will be beneficial from a network perspective as well. Copper remains the most economical medium for the distribution portion of the loop, particularly given the high cost of fiber-to-the-curb technology.[6] In addition, many of the technological advances described in

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[4] *UNE Remand Order* at ¶ 213. At that time CLEC access to the IDLC loop at the central office was not technically feasible, so the CLEC needed to access the loop at the remote terminal. *Id.* at ¶ 217.

[5] *See, e.g., Alcatel Reply Comments* at p. 5.

[6] Vincent Ryan, *Life on the Edge*, Telephony, May 15, 2000 ("*Ryan Article*").

regard to fiber technology are occurring with copper as well. ILECs want to recognize the huge investment they have made in the copper infrastructure and are looking to develop their fiber networks while at the same time getting more out of copper pairs.[7]

This explains why, despite the ILEC exhortations on the need to protect their control over the network, there is a surprising underlying consensus on the need to preserve copper facilities for competitive carriers. As one observer notes:

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[7] *Ryan Article*. For instance, many ILECs plan to use ADSL technology to deploy multiple lines of voice on a single copper pair. *Id.*

> [S]imilarly, despite reservations in filings before the Commission in other contexts, SBC notes that maintaining copper loops is <u>essential</u> to preserve competitive options, especially in light of flourishing technological advances in delivering copper-based DSL services on home-run copper ("These all-copper loops may become even more useful for provisioning DSL-based services because new forms of DSL with longer reach on all copper loops may evolve." ¶ 31)[8]

[8] *NorthPoint Letter* at p. 4 (emphasis in original).

This consensus is reflected in the "voluntary commitment" concerning spare copper made by SBC in connection with Project Pronto. SBC has stated that (1) it has no current plans, or plans under consideration to retire "mainframe terminated" copper facilities with NGDLC deployment;[9] (2) it will follow its established copper retirement policy in a non-discriminatory manner; 3) if it does retire copper facilities pursuant to its NGDLC deployment, it will give six months' notice of such retirement via Internet posting and offer to sell such facilities to unaffiliated parties; and (4) the application of its copper retirement policy during the next three years will result in the retirement of no more that 5% of its total mainframe copper facilities in service as of September 1, 2000.[10] The Commission required SBC to comply with these commitments in the *Project Pronto Order*.[11]

The SBC proposal is a good starting point for the ILEC copper retirement policies that should be implemented. This proposal needs to be modified in light of the comments raised in Docket 98-141, and it needs to be made mandatory for all ILECs. In particular, ILECs should be required to maintain copper facilities for at least ten years. CLECs need that time horizon in

[9] As AT&T notes, "mainframe terminated" copper facilities needs to be clearly defined. *AT&T Letter* at p. 4.

[10] *SBC August 2nd Letter*, Voluntary Commitment No. 7.

[11] Vincent Ryan, *Life on the Edge*, Telephony, May 15, 2000.("*Ryan Article*")

order to adequately finance and implement business plans." Otherwise, end users will suffer because of the restricted choice of competitive alternatives.

B. Next Generation Network Architectures Must Accommodate Voice Loop UNEs

Next generation network architectures will facilitate the ability of ILECs to provide advanced services. However, to some extent these deployments share characteristics with currently deployed networks which have created significant UNE provisioning problems for CLECs. Thus, SBC's Project Pronto architecture is essentially a variant of IDLC systems in that it is an IDLC system provisioned with optical technology. It is far from clear, however, that next generation IDLCs will solve the problems associated with current IDLCs that prevent CLECs from cost effectively ordering loops provisioned with IDLCs.

In the *Local Competition Order*, the Commission concluded that ILECs must provide competitors with access to unbundled loops, regardless of whether the ILEC uses IDLC technology, or similar remote concentration devices, for the particular loop sought by the competitor.[12] The Commission noted that if ILECs were not required to unbundle IDLC-delivered loops, end users served by such technologies would be effectively deprived of competition for their business, and ILECs would be encouraged to hide loops from competitors through use of IDLC technology.[13] The Commission also found that it is technically feasible to

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12 *Local Competition Order*, 11 FCC Rcd at 15692, para. 383.

13 *Id.*

unbundle IDLC-delivered loops through use of a multiplexer to separate the unbundled loop(s) prior to connecting the remaining loops to the switch.[14] In the *UNE Remand Order*, the Commission observed that, in the three years since the *Local Competition Order*, these methods of unbundling IDLC loops had not proven practical and that competitors are not yet able economically to separate and access IDLC customers' traffic on the wire-center side of the IDLC multiplexing devices.[15]

[14] *Id*.

[15] *UNE Remand Order*, fn. 418.

At the time of the *UNE Remand Order*, it appeared that more 20% of loops used DLC technology.[16] SBC's Project Pronto architecture will serve up to 80% of SBC's customers in its 13 state region.[17] Thus, on its face, it appears that SBC's Project Pronto and other ILEC network upgrades involving greater deployment of IDLC provisioned loops could exacerbate the inability of CLECs to obtain loops.

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[16] *UNE Remand Order*, fn. 419.

[17] *Project Pronto Order*, para. 4.

Moreover, it is far from clear that modifications to the SBC/Ameritech merger conditions established by the Commission in the *Project Pronto Order* address the inability of CLECs to access IDLC provisioned loops. Nowhere does that decision address SBC's obligation to provide voice loops over Project Pronto architecture. SBC is required to offer a combined voice and data offering comprised of the "underlying voice loop over its NGDLC systems delivered directly to the Main Distribution Frame" and its new Broadband Offering.[18] It is possible, but unclear, that this could mean that SBC is able to deliver over Project Pronto architecture a voice grade loop to a CLEC at the MDF and that this would be essentially equivalent to a traditional loop. If so, this shows that ILECs are able to do this and the Commission should require all ILECs to do so with respect to any next generation network upgrades. Further, the OCD, while optical, is merely a variation of concentration devices that are used in all IDLC systems. The Commission should promptly end the scenario envisioned in the *UNE Remand Order* to the effect CLECs are "not yet able economically to separate and access IDLC customers' traffic on the wire-center side of the IDLC multiplexing devices"[19] by requiring all ILECs to provide the capability for CLECs to access voice grade loops on the wire-center side of IDLCs. Absent this requirement, voice CLECs will be frozen out of the market for the majority of current ILEC customers, except in the limited circumstances where it is economically feasible for a CLEC to extend facilities to remote terminals, and except to the extent that spare copper loops are available. It will not be

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[18] *Project Pronto Order*, para. 47.

[19] *UNE Remand Order*, para 217.

economically feasible for CLECs to extend facilities to the thousands of remote terminals that ILECs will install as fiber is extended closer to end users.

C. Network Disclosure Rules Should be Updated to Provide for Full Disclosure of Fiber Deployment Plans and of Technical Capabilities of Next Generation Network Architectures

In the *UNE Remand Order*, the Commission determined that ILECs must offer as part of UNEs the full features, functions and capabilities of network elements.[20] In these comments, Allegiance requests that the Commission specify that certain capabilities are part of the loop UNE and/or they be designated as separate UNEs. However, CLECs are disadvantaged in their ability to request advanced capabilities of next generation network architectures because ILECs and their vendors have not fully disclosed the capabilities of the equipment they plan to deploy. SBC's commitment in connection with Project Pronto to provide technical information to CLECs is inadequate because it essentially leaves to SBC's discretion what it will disclose.

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[20] *UNE Remand Order*, para. 167.

Moreover, current network disclosure rules are inadequate for revealing the capabilities inherent in advanced network equipment. The FCC's network disclosure rules are comprised of those rules applicable to all ILECs and those applicable only to BOCs. The network disclosure rules applicable to all ILECs consist of the "All Carrier Rule"[21] adopted in 1980 as part of the FCC's initial regulatory program allowing consumers to purchase telephones from sources other than the ILEC and connect them to the public switched telephone network, and the rules adopted in 1996 implementing Section 251(c)(5) of the Communications Act as amended by the Telecommunications Act of 1996 ("1996 Act"). The "All Carrier Rule" requires ILECs to provide advance written notice to customers of network changes that will affect the use or performance of telephone terminal equipment. Section 251(c)(5) requires ILECs to provide public notice of changes in the information necessary for the transmission and routing of services using that local exchange carrier's facilities or networks, as well as of any other changes that would affect the interoperability of those facilities and networks.[22]

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[21] 47 C.F.R. § 68.110(b).

[22] Section 251(c)(5) of the Communications Act states that ILECs must:

provide reasonable public notice of changes in the information necessary for the

transmission and routing of services using that local exchange carrier's facilities or networks, as well as of any other changes that would affect the interoperability of those facilities and networks.

The network disclosure requirements applicable only to the BOCs were adopted in the late 1980s as part of the FCC's *Computer III* regulatory framework governing ILEC provision of "enhanced services." The *Computer III* network disclosure rules impose a broad obligation on BOCs to disclose all information related to intercarrier interconnection or connection of customer premises equipment with reasonable advance notice prior to implementation of network changes.[23]

The various obligations imposed by these requirements appear to overlap to some extent, but require an ILEC to provide public notice regarding any network change that affects the following: (1) a competing service provider's performance or ability to provide service; or (2) the ILEC's interoperability with other service providers.[24] The description of the planned changes must include at a minimum references to technical specifications, protocols, and standards regarding transmission, signaling, routing, and facility assignment, as well as references to

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[23] 47 C.F.R. Sec. 64.702(d)(2). The 1996 Act also established network disclosure obligations applicable only to the BOCs as part of restrictions on BOC manufacturing in Section 273 of the Act. Section 273(c)(1) requires BOCs, in accordance with regulations of the FCC, to file with the FCC and maintain complete information with respect to the protocols and technical requirements concerning connection to and use of telephone exchange service facilities. The FCC initiated a rulemaking proceeding in 1996 to implement the network disclosure obligations and other requirements of Section 273, but has not yet acted in that proceeding. *Implementation of Section 273 of the Communications Act of 1934, as amended by the Telecommunications Act of 1996*, Notice of Proposed Rulemaking, CC Docket No. 96-254, FCC 96-472 (1996)("*BOC Manufacturing Proceeding*").

[24] *See e.g.*, 47 C.F. R. Sections 51.325- 51.335. "Interoperability" is defined as the ability of two or more facilities or networks, to be connected, to exchange information, and to use the information that has been exchanged. "Services", as used in the Rules, includes both telecommunications and information services.

technical standards that would be applicable to any new technologies or equipment, or that may otherwise affect interconnection.

The ILEC must provide public notice of planned changes at the "make/buy" point, and at least 12 months before implementation of the changes. The "make/buy" point is defined as,

> the time at which an ILEC decides to make for itself, or to procure from another entity, any product, the design of which affects or relies on a new or changed network interface. If an ILEC's planned changes do not require it to make or to procure a product, then the make/buy point is the point at which the ILEC makes a definite decision to implement a network change.

Under the Rules, "product" may be either hardware or software, and a "definite decision" is reached when an ILEC determines that the change is warranted, establishes a timetable for implementation, and takes any action towards implementation of the network change. If the changes can be implemented within 12 months of the make/buy point, public notice must be given at the make/buy point, but at least six months before implementation of the changes to the network.

An ILEC may protect confidential or proprietary information that is otherwise required to be disclosed under the Rules by making a statement that the ILEC will make further information available to those signing a nondisclosure agreement. The FCC permits use of nondisclosure agreements to protect both confidential information of the ILEC as well as confidential information of third party manufacturers who provide the equipment to be used in the ILEC's network. Upon receipt of a request for disclosure of confidential or proprietary information, the

applicable public notice period is tolled to allow the interested parties, including third party equipment manufacturers, to agree on suitable terms for a nondisclosure agreement.

The FCC has determined that market and technical trials are not subject to disclosure under Section 251(c)(5) of the Act. The FCC stated that notice of trials may be given, as needed, on a private, contractual basis. The FCC did not define trial for purposes of this exemption but in other proceedings has limited BOC market trials to one year in duration.

While these requirements comprehensively establish obligations on ILECs to disclose information that will affect interconnection or interoperability, they do not go far enough in terms of disclosing the full features, functions, and capabilities of network elements that have been, or could be, designated as UNEs. Thus, the current rules focus on ILEC network changes that will have a direct impact on interconnection or interoperability, but not on capabilities of such elements that will not have an impact on interconnection or interoperability because the ILEC does not plan to activate or use that capability. Thus, current network disclosure rules essentially leave CLECs in the dark as to the full features, functions, and capabilities of next generation architectures and current generation architecture changes.

In connection with Project Pronto, SBC ultimately agreed to offer some capabilities of its equipment, such as CBR, that it initially claimed it was unable to offer. Only because SBC needed a waiver of the SBC/Ameritech merger conditions were CLECs able to obtain sufficient leverage to obtain this disclosure and concession from SBC. Accordingly, the Commission should revise its network disclosure rules to provide that ILECs must disclose all of the features, functions, and

capabilities of the network, even if not currently deployed. For this purpose, the Commission should provide that ILECs must include capabilities that may be realized by use of any vendor-supplied products that are currently available or expected within one year. This is the only way of assuring that CLECs and regulators will know what are the capabilities of network elements that must be offered as part of UNEs, or potentially designated as separate UNEs. The Commission should also provide that, consistent with current rules, CLECs may obtain vendor proprietary information, subject to appropriate nondisclosure agreements.

In addition, the Commission should provide that market and technical trials of next generation network architectures are not exempt from network disclosure requirements. If SBC had fully disclosed its plans for Project Pronto from the outset, instead of waiting until SBC/Ameritech merger was approved, CLECs and the Commission would have been better able to evaluate the technical and competitive implications of this project. The Commission should make market and network trials subject to network disclosure obligations.

II. THE COMMISSION SHOULD REFINE EXISTING, AND DESIGNATE NEW, UNES IN LIGHT OF ILEC DEPLOYMENT OF NEXT GENERATION ARCHITECTURE

A. The Commission Should Include Advanced Services Electronics Within the Definition of Loop and Transport UNEs

A network element is defined under the Act as a "facility or equipment used in the provision of a telecommunication service" which includes the "features, functions, and capabilities that are provided by means of such facility."[25] The loop was initially defined by the Commission as "a transmission facility between a distribution frame, or its equivalent, in an incumbent LEC central office, and the network interface device at the customer premises."[26] In its *UNE Remand Order*, the Commission modified its definition of the loop network element to include "all features, functions and capabilities of the transmission facilities, including dark fiber and attached electronics (except those used for the provision of advanced services, such as DSLAMs) owned by the incumbent LEC, between an incumbent LEC's central office and the loop demarcation at

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[25] 47 U.S.C. § 153(29).

[26] *In the Matter of the Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98, FCC 96-325, First Report and Order, 11 FCC Rcd. at 15499 at ¶ 380 (1996)("*Local Competition Order*").

the customer premises."[27] The Commission has sought to ensure that its definition of the loop will apply to "new as well as current technologies."[28]

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[27] *In the Matter of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, FCC 99-238, ¶ 167 (1999)("*UNE Remand Order*").

[28] *Id.*

SBC's request for waiver of the SBC/Ameritech merger conditions to authorize the SBC/Ameritech incumbent LEC to own combinations POTS/ADSL plugs/cards located in remote terminals as well as optical concentration devices ("OCDs") located in central offices demonstrates the unworkability of excluding line cards and OCDs from the definition of the loop UNE.[29] The Commission should alter its determination in the *UNE Remand Order* concerning inclusion of advanced services electronics in loop and transport UNEs to provide that they will be both included in the loop and transport UNEs and will be available as separate UNEs, where technically feasible. This will provide the greatest range of options to CLECs to provide competitive services. Permitting access to the loop and transport UNE separate from the advanced services electronics will also permit CLECs to provide their own advanced services electronics.

Allegiance recognizes that in order for electronics in loop and transport network elements to be defined as UNEs, it will be necessary to meet the statutory "impair" test. However, the unavailability of electronics as separate UNEs that provide the full features and functionalities of loop and transport network elements is likely to impair CLECs' ability to provide competitive services for the same reasons that unavailability of the loop would impair a CLEC's ability to provide competitive services -- it is not economically feasible for CLECs to obtain loops, or their

[29] *Applications for Consent to Transfer Control of Licenses and Section 214 Authorizations from Ameritech Corporation, Transferor, to SBC Communications, Inc., Transferee,* CC Docket No. 98-141, Request for Interpretation, Waiver or Suspension of Merger Conditions Affecting the Ownership of Plugs/Cards and OCDs (Feb. 15, 2000).

advanced services components, from providers other than the ILEC. Therefore, the Commission should determine that advanced services equipment in loop and transport network elements will be separate UNEs, as well as being available as part of the loop and transport UNE.

B. Line Cards and OCDs Should Be Included As Loop UNEs

Line Cards. The Commission should include combination card/plugs within the definition of a loop. By SBC's own definition the combination unit equipment is "an integrated piece of technology having both POTS and DSLAM capabilities as well as the 'splitter' functionality."[30] DLCs, unlike DSLAMs, are not used solely for the provision of advanced services, but are "deployed where there are multiple service requirements (*i.e.*, voice and data)."[31] Thus, the basis for excluding DSLAMs from the definition of the loop is not present with the combination cards. They are integrated, multi-functional equipment that play a vital role in the

[30] *SBC Letter* at p. 4.

[31] *Alcatel Comments*, p. 2. SBC argues that the cards are not advanced services equipment, and notes the majority of the cards will be used to provide POTS service, at least initially. *SBC Letter* at p. 4; *see also*, SBC Reply Comments at p. 7.

transmission of non-advanced, as well as advanced, services. The Commission noted in its *UNE Remand Order* that:

> [S]ome loops, such as integrated digital loop carrier (IDLC), are equipped with multiplexing devices, without which they cannot be used to provide service to end users. Because excluding such equipment from the definition of the loop would limit the functionality of the loop, we include the attached electronics (with the exception of DSLAMs) within the loop definition.[32]

Likewise, these integrated cards must be included in the definition of the loop because excluding them would limit the functionality of the loop. The new equipment being produced by vendors today provides such integrated functionality so that the line between implementing advanced and implementing non-advanced services is blurred. The Commission should rethink its exclusion of equipment used in the provision of advanced services from the definition of the loop. This distinction between the loop and advanced services equipment is no longer tenable given the technology advances that have resulted in integrated equipment. Imprecise application of such a distinction would exclude equipment that is crucial to the functionality of the loop.

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[32] *UNE Remand Order* at ¶ 175.

OCDs. OCDs, which are essentially ATM switches, separate each CLEC's ATM packetized bitstream from the common ATM packetized bitstream coming from the remote terminals, and hand off the appropriate packetized bitstream to each CLEC and ILEC advanced services affiliate.[33] Under SBC's proposed network configuration in Project Pronto, the ATM switches are "the only means by which the ADSL-based traffic of multiple CLECs can be aggregated and disaggregated."[34] Thus, the OCD will be the only feasible point at which CLECs

[33] CC Docket 98-141, *Ex Parte* Letter from DSL Access Telecommunications Alliance to Carol Mattey at p. 4 (April 11, 2000)("*DATA Letter*").

[34] *Id.* The placement of the OCDs in the central office is an indication of SBC's failure to consider more economical alternatives, such as allowing CLECs to access the bitstream at the DLC, which would preclude the need for a central-office based ATM switch, including the need for a multiport DLC at the CO, and allow for the deployment of fewer ATM switches. *Id.* The failure to implement a cost-effective architecture will surely lead to higher proposed cost-recovery from SBC for use of this functionality. *Id.*

can get access to the ATM's bit streams coming from their customers.[35] Therefore, the Commission should define the loop UNE as including OCDs where such devices are deployed. This will enable CLECs to access the OCD functionality as part of the loop UNE.

C. Line Cards and OCDs Must be Available as Separate UNEs and CLECs Must Be Permitted to Provide Their Own Line Cards and OCDs

[35] *Id.*

CLECs must also be permitted to provide their own line cards. These plug/cards are multi-functional, *i.e.*, they provide DSL functionality, DSLAM functionality, and splitter functionality.[36] SBC describes the combination card/plug as "an integrated piece of technology having both POTS and DSLAM capabilities as well as the "splitter" functionality."[37] SBC has previously threatened to prohibit the collocation of CLEC DSLAMs within most remote terminals because of alleged lack of space.[38] As discussed below, the Commission should require ILECs to provide additional collocation space at remote terminals, and therefore, lack of space should not be a sufficient reason for denying collocation at remote terminals. [39] However, to the

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[36] *Petition of Covad Communications Company for an Arbitration Award Against Bell Atlantic Pennsylvania, Inc., Implementing the Line Sharing Unbundled Network Element; Petition of Rhythms Links, Inc. for an Expedited Arbitration Award Implementing Line Sharing*, PA PUC Docket Nos. A-310696F0002 and A-310698F0002, Recommended Decision at p. 36 (June 28, 2000)("*PA ALJ Ruling*")

[37] CC Docket No. 98-141, Letter from Paul K. Mancini, SBC Vice President and Assistant General Counsel to Lawrence Strickling, Common Carrier Bureau at p. 4 (February 15, 2000)("*SBC Letter*").

[38] *In the Matter of SBC Communications, Inc., et al., for Provision of In-Region InterLATA Services in Texas*, CC Docket No. 00-65, Supplemental Comments of AT&T Corp. at p. 24 (April 26, 2000); *Response to SBC's Requests for Interpretation, Waiver or Suspension of Merger Conditions Affecting the Ownership of Plugs/Cards and OCDs,* CC Docket 98-141, *Ex Parte* Letter from DSL Access Telecommunications Alliance to Carol Mattey at p. 3 (April 11, 2000)("*DATA Letter*").

[39] *See also* CC Docket 98-141, Comments of Alcatel USA at p. 4 (March 2, 2000); *SBC Letter* at p. 2.

extent space is an issue at remote terminals, plug-in cards provide a solution. The line cards provide an "efficient, convenient and less capital intensive means" for the CLEC to access the subloop.[40]

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[40] *SBC Letter* at p. 3.

The problem is that the particular line cards utilized by SBC, and made by Alcatel USA, limit the type of xDSL "flavors" a carrier may provide. For instance, the line cards would not support SDSL service.[41] For CLECs desiring to provide xDSL services, other than those Alcatel's equipment supports, Alcatel suggests that these carriers deploy their own DSLAMs.[42] This is not a viable option for CLECs, however, given the lack of collocation space in many SBC remote terminals, and that the level of concentration present at a particular remote terminal may not justify the cost of collocation.[43] One solution to this problem would be to allow CLECs to provide their own line cards tailored to the particular class of service they seek to offer and to have SBC install said line cards. Unfortunately, the Project Pronto Order did not impose this obligation and SBC and other ILECs object to this option. SBC argues that it is under no legal obligation to allow CLECs to reconfigure SBC's equipment, and it also argues that this option is

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[41] CC Docket 98-141, Reply Comments of Alcatel USA at p. 2 (March 10, 2000)("*Alcatel Reply Comments*").

[42] *Id.*

[43] *Petitions of Covad Communications Company and Rhythms Links, Inc. for Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996 to Establish an Amendment for Line Sharing to the Interconnection Agreement with Illinois Bell Telephone Company d/b/a Ameritech Illinois, and for an Expedited Arbitration on Certain Core Issues*, Illinois Commerce Commission Docket Nos. 00-0312 and 00-0313, Arbitration Decision at p. 29 (August 17, 2000)("*Illinois Line Sharing Order*").

technically infeasible.[44] Thus, it is SBC's position that CLECs should be limited in the provision of their xDSL services to the type of service that is supported by the ILEC's line cards. Equally troubling is SBC's position that at any time it may transfer the line cards to its Advanced Service affiliate, and that "the obligations that would travel to the affiliate with such equipment would be evaluated on a case-by-case basis."[45]

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[44] CC Docket 98-141, Reply Comments of SBC Communications, Inc. In Support of a Determination that SBC Incumbent LECs May Own Combination Plug/Cards and Optical Concentration Devices at p. 15 (March 10, 2000)("*SBC Reply Comments*"). Ironically, one of the initial proposals SBC considered making to the Commission was to allow CLECs to own their cards and SBC would install the cards. *SBC Letter* at p. 3.

[45] *SBC Reply Comments*, p. 8. Also troubling is SBC's apparent view that it can "fund its affiliate such that the affiliate, itself, could construct new remote terminals and install DSLAM equipment without subjecting the affiliate or the incumbent to the conditions proposed by the DSL CLECs or even the unbundling requirements of the Act." *Response to SBC's Requests for Interpretation, Waiver or Suspension of Merger Conditions Affecting the Ownership of Plugs/Cards and OCDs,* CC Docket 98-141, *Ex Parte* Letter from NorthPoint

Communications, Covad Communications, and Rhythms NetConnections to Carol Mattey at p. 3 (May 31, 2000)("*NorthPoint Letter*")

In order to address these issues, CLECs must be permitted to provision line cards, both at remote terminals and in the central office, that would support the types of services they wish to offer. The Illinois Commerce Commission recently required:

> Ameritech to install plug-in cards which support all DSL-based services requested by the CLECs. If Covad's or Rhythms' business plan calls for a particular DSL service that requires a plug-in card that Ameritech does not provide itself, the burden of proof will lie with Ameritech to prove that the plug-in card is incompatible with Project Pronto technology.[46]

This Commission should go a step further and permit CLECs to provision their own line cards in order to permit CLECs to access the full functionality and capability of the loops they purchase.

CLECs should also be permitted to provide their own OCDs, subject only to technical feasibility. This should clearly be permitted not only where CLECs obtain dark fiber loops, but also where ILECs can provide separate optical communications streams to CLECs.

D. The Commission Should Designate New UNEs.

1. DWDM Equipment

[46] *Id.*

Dense wave division multiplexing ("DWDM") technology, multiplies the capacity of an optical fiber by simultaneously operating at more than one wavelength, thereby allowing multiple information streams to be transmitted simultaneously over the fiber.[47] This is an expensive option, but it gives a carrier growing capacity and intelligent provisioning of bandwidth, and is perhaps the best long-term strategy for promoting capacity in a network.[48] Verizon is using this technology in its large metropolitan areas, and such technology may help promote its fiber-to-the-curb deployments.[49]

The effect of such technology on the loop could be revolutionary. The technology will allow network carriers "to sell or lease the individual streams of light in fiber-optic networks that transport voice, video, or image traffic."[50] Customers, "such as ISPs, will be able to purchase

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[47] *In the Matters of Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket Nos. 98-147, 96-98, Order on Reconsideration and Second Further Notice of Proposed Rulemaking in CC Docket No. 98-147, and Fifth Further Notice of Proposed Rulemaking in CC Docket No. 96-98, FCC 00-297 at ¶ 120, n. 253 (August 10, 2000)("*Collocation Order and NPRM*").

[48] *Ryan Article.*

[49] *Id.*

[50] *Nortel Article.*

only the network bandwidth they want, when they want it."[51] It will provide carriers with new revenue streams and allow companies to "boost sales by packaging wavelengths with Internet services and lift efficiency by leasing or trading network bandwidth as needed."[52] As one analyst notes:

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51 *Id.*

52 *Id.*

> [O]ptical wavelengths are the building blocks of the next-generation service provider networks. We anticipate that optical wavelengths will be the unit of commerce for all service provider networks.[53]

The Commission should require ILECs to offer optical wavelengths as separate UNEs. The Commission has already taken this approach with line sharing in unbundling the electrical high frequency portion of copper loops. Just as the frequency of a copper loop is part of its "capability,"[54] so too is the wavelength of a fiber loop or subloop. Carriers should be allowed either to access unbundled loop functionalities such as wavelength, separate from other loop functions, or to access, at their option, the entire unbundled loop facility.[55] In this way, a carrier that only desired a particular wavelength could purchase that particular wavelength. If a carrier wanted to access all wavelengths of the loop, it could purchase the entire loop and have exclusive

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[53] *Id. quoting* Ron Steele, Chief Technology Officer of NEON Systems, Inc.

[54] *Line Sharing Order* at ¶ 17.

[55] *Id.* at ¶ 18.

use of the facility. The Commission could utilize a similar approach in regard to the DWDM electronics that it uses in regard to line splitters, *i.e.*, allowing the ILEC to install and maintain the electronics unless such control is inhibiting the CLEC's provisioning of services it seeks to provide.[56]

2. Constant Bit Rate Class of Service

[56] *Line Sharing Order* at ¶¶ 76-79.

Constant Bit Rate ("CBR") is a data service where the bits are conveyed regularly in time and at a constant rate, *i.e.*, "following a timing source or clock just as members of a marching band follow the beat of the drummer."[57] CBR technology could be the basis for current high-speed access solutions because it allows carriers to provide a full array of services.[58] This service is especially important in regard to sending uncompressed voice and video traffic because they are sensitive to variable delay, thus, they have to be transported without any interruptions in

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[57] Newton's Telecom Dictionary 210 (16th Ed. 2000).

[58] Larry Hurtado, *In the Loop*, Telephony ("*Hurtado Article*").

the flow of data.[59] As data transmission becomes more multimedia, *i.e.*, voice over ATM or IP and videoconferencing, quality of service ("QoS") issues arise.[60] These media are extremely bandwidth and delay sensitive, and unless packets are capable of being delivered in a real-time, orderly and timely manner, the quality of service is greatly affected.[61] Electronics that provide for CBR QoS address these problems.[62]

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[59] Newton's Telecom Dictionary 210 (16th Ed. 2000).

[60] *Id.* at 692.

[61] *Id.*

[62] *Id.*; Larry Hurtado, *Switching and Transmission*, Telephony (September 13, 1999)("*Hurtado Article*"). Solutions are already being developed to solve the spectrum compatibility problems associated with CBR service, and, thus, allow carriers to reap the full

advantage of such service. Next-generation technologies are being developed that will "employ burst-mode transmissions that allow it to 'listen' to line characteristics and manage around potential interfering services, making it compatible with POTS, T-1, ISDN/IDSL DSL, high bit-rate DSL, symmetrical DSL, ADSL, and G.lite services." *Id*.

In connection with Project Pronto, CLECs have requested that SBC provide CBR class of service because it would provide a guaranteed bandwidth without queuing delays or discards.[63] SBC's initial position was that it could only provide unspecified bit rate ("UBR") service. UBR service will not permit CLECs to provide the full range of DSL services that they are currently providing and would also preclude future DSL services such as VDSL and G.shDSL.[64] SBC eventually agreed to provide such service. CBR service would thus avoid the technical limitations imposed by an ILEC's choice of a particular technology that could otherwise limit CLECs to a particular service, such as SBC's initial proposal to limit CLECs to providing ADSL over its NGDLC architecture. Accordingly, the Commission should designate CBR as a UNE.

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[63] CC Docket 98-141, Letter from @Link Networks, Inc., to Carol Mattey, Deputy Director, Common Carrier Bureau, at p. 1 (June 30, 2000)("*@Link Letter I*").

[64] *Id.* For instance, UBR would not be conducive to providing voice or video over DSL.

3. The Broadband Fiber Loop UNE

The Commission should establish a fiber loop UNE product that would provide a CLEC use of an integrated loop facility. This would be based on SBC's Broadband Service Offering required in connection with Project Pronto.[65] In that offering, SBC offers access to a:

[65] CC Docket No. 98-141, Letter from Priscilla Hill-Ardoin, Senior Vice President SBC Telecommunications, Inc. to Magalie R. Salas, Secretary of the FCC, SBC Voluntary Commitments at page 2 (August 2, 2000)("*SBC Commitments Letter*").

combined network arrangement consisting of: copper facilities from the NGDLC device deployed in remote terminal sites (includes CEVs, huts, and cabinets) to the end user location; a permanent virtual circuit that consists of ATM data transported over a common OC-3c fiber facility from the NGDLC in the remote terminal terminating on the central fiber distribution frame and delivered to a leased affiliated or unaffiliated telecommunications carrier port on the SBC/Ameritech incumbent LEC's OCD in the serving wire center; and a port on the SBC incumbent LEC's OCD with associated cross-connects to extend the port to a point of affiliated or unaffiliated telecommunication carrier virtual or physical collocation.[66]

[66] *Id.*

This product offering should be deemed to be an unbundled network element offered in accord with Sections 251 and 252 of the Act at forward-looking costs.[67] The product offering should provide for deployment of equipment that gives CLEC full access to the existing features and functionality of the facility as well as future features and functionality.

[67] As this Commission has noted, it is not enough to implement pro-competitive solutions such as line sharing without more; such solutions will not promote competition unless they are "priced in a way that permits competitive LECs to enjoy the same economies of scale and scope as the incumbent LECs." *Line Sharing Order*, p. 63. The same would hold for the Fiber UNE, *i.e.*, unless the pricing for the UNE reflects the economies of scale and scope the ILECs derive from their new-generation architecture, competition will not take root.

III. THE COMMISSION SHOULD ESTABLISH STRENGTHENED COLLOCATION RULES ON REMAND

A. The Commission Should Establish Parity Between ILECs and CLECs Concerning Access to ILEC Central Offices

Section 251(c)(6) of the Act requires ILECs to provide for "physical collocation of equipment necessary for interconnection or access to unbundled network elements" "on rates, terms, and conditions that are just, reasonable, and nondiscriminatory."[68] Allegiance submits that the Commission has authority under this section to require absolute competitive parity between ILECs and CLECs with respect to occupation and use of ILEC central offices and remote terminals. So far, in implementing the 1996 Act, the Commission has not fully explored its authority under this nondiscrimination obligation. In fact, as further explained below, this provision is a well-spring of authority enabling the Commission to impose far reaching nondiscrimination obligations in terms of provision of physical collocation. It would be hard to overstate the breadth of the Commission's authority to prescribe reasonable terms and conditions for collocation and to prevent discrimination by the incumbent against CLECs in providing collocation of equipment deemed "necessary" for interconnection or access to UNEs.

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[68] 47 U.S.C. Section 251(c)(6).

The basic regulatory standard of reasonableness and nondiscrimination is an essential feature of virtually all federal regulatory statutes, including the Interstate Commerce Act ("ICA"),[69] the Natural Gas Act,[70] the Federal Power Act,[71] as well as the Communications Act. The Courts have observed repeatedly that the all-embracing statutory proscription against "undue" or "unreasonable" discrimination comprehends *every* form of unreasonable discrimination within the power of Congress to condemn.[72] It is said that the purpose of Congress in adopting such language was "to cut up by the roots *every* form of discrimination, favoritism and

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[69] 49 U.S.C. §§ 2, 3(1) (1977).

[70] 15 U.S.C. §§ 717 *et seq*.

[71] 16 U.S.C. §§ 824.

[72] *See,* e.*g., Merchants Warehouse Co. v. United States*, 283 U.S. 501, 512 (501); *Louisville & Nashville R.R. Co. v. United States*, 282 U.S. 740, 749-750 (1931).

inequality."[73] Indeed, under Section 202(a) of the Telecommunications Act of 1934, not only have the courts upheld this Commission's broad authority to define the scope of discrimination deemed unreasonable, but also the courts have affirmed this Commission's authority to fashion remedies, either retrospectively through injunction, or prospectively through the Commission's authority to prescribe just and reasonable terms and conditions of service.[74]

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[73] *See, e.g., Louisville & Nashville R.R. Co. v. Mottley*, 219 U.S. 467, 478 (1911)(emphasis added).

[74] *See, e.g., National Association of Motor Bus Owners v. FCC*, 460 F.2d 561, 565 (D.C. Cir. 1974).

Such generic antidiscrimination provisions have justified agency action *far* more sweeping than merely establishing rules requiring nondiscrimination in the provision of collocation space. The Federal Energy Regulatory Commission ("FERC") nearly 15 years ago completely restructured the natural gas industry, based *solely* on its longstanding authority to prevent "undue" discrimination under Section 5 of the Natural Gas Act ("NGA").[75] The centerpiece of this undertaking was the imposition of "open access" requirements on vertically integrated, producer-owned or affiliated pipelines, eliminating overnight an industry structure (*i.e.*, bundled commodity sales and transportation service) that had long been fostered under the NGA.[76] Reversing decades of regulatory policy, the FERC required gas pipelines – *for the first* time – to act as common carriers, transporting gas for third party shippers on the same terms and conditions that they did for themselves. Acknowledging that the NGA imposed no explicit "common carrier" obligation on pipelines – in contrast to railroads or telecommunications carriers – the court nonetheless upheld the open access requirement, noting that "the Act fairly bristles with concern for undue discrimination."[77] The court again sustained an even more sweeping restructuring of the electric industry just last month – based on a broad interpretation of the similar

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[75] *See* 50 Fed. Reg. 42,408 (1985); 15 U.S.C. §717(d); *See Associated Gas Distributors v. FERC*, 824 F.2d 981. 998 (D.C. Cir. 1986).

[76] Specifically, as in the case of the local exchange carriers, interstate gas pipelines transported gas primarily for their affiliates, whether produced by those affiliates or purchased at regulated prices. *Id*.

[77] *Id*. at 998.

antidiscrimination provisions of the Federal Power Act ("FPA")[78] – including the imposition of an *in*voluntary retail wheeling obligation on all public utilities with transmission facilities.[79]

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[78] 16 U.S.C. § 824d-e.

[79] *See Transmission Access Policy Study Group v. FERC*, 2000 WL 762706 (D.C. Cir.)

Where, as under the 1996 Act, the Commission's authority to prevent discrimination by incumbent LECs is considerably broader than that conferred under the other statutory schemes discussed above (*including* Section 202(a) of the 1934 Act), there can be little doubt of the FCC's authority to establishing far reaching rules concerning nondisciminatory provision of collocation space.[80] First, as this Commission has recognized, the prohibition against discrimination that appears throughout Section 251 is unqualified and absolute; unlike the statutes discussed above, Section 251 does not qualify the term "nondiscriminatory" with the words "undue" or "unjust and unreasonable."[81] Second, by requiring incumbent LECs to provide interconnection to their competitors, the Act creates an incentive "for the LEC to discriminate against its competitors by providing them with less favorable terms and conditions of interconnection than it provides itself."[82] That manifest incentive warrants full enforcement of the strict prohibition on discrimination comprehended in the statutory language of Section 251. Accordingly, in interpreting the prohibition on discrimination under Section 251, the Commission stated that:

> We believe that the term 'nondiscriminatory,' *as used throughout section 251*, applies to the terms and conditions an incumbent LEC imposes on third parties as well as on itself. In any event, by providing interconnection to a competitor in a manner less efficient than an

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80 *See Local Competition Order* at ¶ 218.

81 *Id.*

82 *Id.*

> incumbent LEC provides itself, the incumbent LEC violates the duty to be "just" and "reasonable" under section 251(c)(2)(D).

Id. (emphasis added). This interpretation of nondiscriminatory applies equally to collocation deemed "necessary" under Section 251(c)(6) as it does to all the other various obligations imposed on ILECs under Section.[83]

In accordance with its comprehensive authority to assure reasonable and nondiscriminatory physical collocation in ILEC central offices, in this proceeding the Commission should reestablish rules governing the terms and conditions for collocation that will achieve complete competitive parity between the incumbent LECs and their CLEC customers. The Commission should establish rules that provide that CLECs have the same rights to collocate in ILEC central offices and remote terminals- in terms of access, price, quantity and use of space - as those enjoyed by ILECs.

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[83] Under even the less rigorous "undue discrimination" standard, the court of appeals has upheld the extremely onerous restrictions against discrimination in favor of affiliates, including a requirement that the terms of transactions among affiliates be made public. *See*

B. The Statute Permits Collocation Of A Full Range of Telecommunications Equipment In ILEC Central Offices

1. "Necessary" Should Be Interpreted in Light of the Goals of the Act.

Congress intended the 1996 Act to "provide for a pro-competitive, de-regulatory national policy framework designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services to all Americans by opening all telecommunications markets to competition."[84] In establishing collocation rules, the Commission should keep in mind this overarching pro-competitive goal of the 1996 Act. In choosing among possible interpretations of the statutory language, the Commission should select one that is consistent with the pro-competitive goals of the Act. Significantly, Congress did not define "necessary." Therefore, the Commission has discretion to interpret and define this term in ways that will promote the goals of the Act, and it should do so.

2. "Interconnection" and "Access to UNEs" Should be Broadly Defined

[84] S. CONF. REP. No. 104-230, at 1 (1996). See also *Iowa Utils Bd. v. FCC*, 120 F.3d 753, 791 (8th Cir. 1997) (stating that Congress passed the 1996 Act, in part, "to erode the monopolistic nature of the telephone industry by obligating [ILECs] to facilitate the entry of competing companies into local telephone service").

The Commission should broadly define interconnection and access to UNEs. Specifically, so called packet-switches and equipment that interact with or receive packetized data are integral to interconnection and, therefore, necessary under the statutory test and eligible for collocation even on a stand-alone basis.

Interconnection is an intersection between two networks allowing information to flow from one network to the other, while switching is a form of routing that directs the information through the intersection towards its ultimate destination. In common parlance, an intersection may perform routing functions without losing its character as "intersection." For example, the exit ramps on freeway intersections typically perform a routing function, separating the traffic flow according to which direction it will follow on the intersecting freeway. In addition, exit ramps frequently have two or more lanes that further separate the traffic according to ultimate destination. Even though the ramps integrate the routing function and the intersection function, it is accurate – as a matter of common usage – to describe the ramps as part of the freeway "intersection." The ramps may also be described accurately as "necessary" for the intersection. While it might be technically possible to build an old-fashioned highway intersection, if a system of ramps is more efficient, it is consistent with common usage to consider the ramps as part of the "intersection" and as "necessary" for the intersection, even though they integrate the routing and the intersection functions.

By the same token, as the contemporary telecommunications market becomes increasingly characterized by packetized data traffic, there is no meaningful distinction between

interconnection and switching functions, especially in equipment that is no more than data processing equipment that receives and processes data streams according to software resident in the equipment. While circuit switching equipment establishes connections between circuits, and open and close circuits, packet "switches" at most determine what routes data packets should take over circuits, usually dedicated circuits. This function is integral to exchange of packetized information. Accordingly, equipment such as ATM switches and routers are themselves necessary for interconnection under the statutory standard whether they are viewed as integrated with other functions or not. It is worth noting that the OCD device that SBC plans to employ in connection with its "Project Pronto" is essentially an ATM switch. As a result, it is necessary that CLECs deploy ATM devices in order to interconnect with these OCDs. Therefore, CLECs should be able to collocate such devices.

The Commission should also define access to UNEs as encompassing any interaction with the features, functions, and capabilities of UNEs. The Act defines network elements as including their "features, functions, and capabilities."[85] In order to access those functionalities, CLECs must employ equipment that is capable of interacting with those features, functions, and capabilities. Therefore, any such equipment meets the statutory "necessary" test because it "enables" CLECs to access those features, functions, and capabilities of the UNEs. As ILECs employ more advanced electronics in loops and central offices, the range of equipment that

[85] 47 U.S.C. Section 3(29).

CLECs may collocate correspondingly increases. At the present time, ILECs are increasingly deploying data equipment and optical systems as part of loops and other UNEs. As described elsewhere in these comments, the Commission should designate a number of new UNEs necessary to interconnect with and gain access to the next generation architectures being deployed by ILECs. The Commission should determine that any equipment that interacts with any of the capabilities of these UNEs is necessary for access to UNEs.

3. The "Necessary" Standard Adopted For Proprietary UNEs Is Too Restrictive

In the *Collocation Reconsideration Order and NPRM*, the Commission asked for comment on whether it should adopt the definition of necessary that it employed in the *UNE Remand Order* concerning access to proprietary network elements.[86] In the *UNE Remand Order*, the Commission defined necessary as "if taking into consideration the availability of alternative elements outside the incumbent's network . . . lack of access to that element would . . . preclude a requesting carrier from providing the services it seeks to offer."[87] While it may be appropriate for the purpose of protecting a carrier's proprietary rights, this definition of "necessary" is too restrictive for use in the collocation context. Instead, as discussed, "necessary" should be defined to permit collocation of equipment that "enables" interconnection or access to UNEs under Sections 251(c)(2)(1), thereby enabling the CLEC to provide the full range of telecommunications offerings. Moreover, there is no need for the Commission to employ the same definition of "necessary" for collocation as it applied to proprietary UNEs since the necessary standard for access to proprietary UNEs was intended to afford some protection to proprietary information. This is not a consideration with respect to collocation of equipment by CLECs on ILEC premises and, therefore, there is no need to assume that Congress intended the same restrictive definition to apply. In any event, inability to collocate equipment that enables interconnection or access to UNEs would preclude CLECs' ability to provide service and, therefore, would meet the highly

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86 *Collocation Reconsideration Order and NPRM*, para 75.

87 *UNE Remand Order*, para 44 .

restrictive definition of "necessary" used in the *UNE Remand Order* for proprietary network elements.

B. Any Commercially Available Equipment that Enables Interconnection or Access to UNEs Meets the "Necessary" Test

As discussed, the Commission should determine that equipment that "enables" interconnection or access to UNEs meets the necessary test. Indisputably, in order to obtain interconnection or access to UNEs, CLECs must use such equipment. In the words of the D.C. Circuit, such equipment is "indispensable"[88] for , or, alternatively "directly related to"[89] interconnection or access to UNEs because without such equipment, CLECs may do neither. Therefore, such equipment meets the statutory test of necessary for interconnection or access to UNEs because it enables interconnection and access to UNEs by virtue of capabilities and functions that make possible such interconnection or access.

There are numerous products on the market that have such capabilities and enable interconnection or access to UNEs. The only issue, therefore, is what among the total set of equipment that enables interconnection or access to UNEs may be collocated. The Commission

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88 *GTE v. FCC*, 205 F.3d at 424.

89 *Id.*

should reject ILEC requests that can be expected to be made in this proceeding to narrowly define the types of equipment that enable interconnection or access to UNEs. Instead, the only test that the Commission could administer as a practical matter is to let the marketplace define the equipment that enables interconnection or access to UNEs. In other words, if the equipment is commercially available and it enables interconnection or access to UNEs, it may be collocated. Absent reliance on the marketplace to define what equipment may be used for interconnection or access to the UNEs, the ability of CLECs to timely deploy new equipment capable of providing more efficient or advanced services will lag behind advances in technology and the deployment of such technology by the ILECs.

C. Multifunction Equipment Is Eligible For Central Office Collocation

1. Multifunction Equipment Is Necessary for Interconnection If It Contains Features and Functions That Enable Interconnection or Access to UNEs

As discussed, any equipment that is commercially available and that "enables" interconnection or access to UNEs meets the necessary test. Further, consistent with the ordinary meaning of the words in the statute and the statutory purposes, "necessary" may be interpreted to mean that the ILEC must provide collocation of any equipment that contains the features and functionalities enabling interconnection, despite additional telecommunications functionalities that this equipment may contain. This would include equipment that enables interconnection but also performs data routing and other functions, including switching, to the extent that any such functionalities may not themselves be viewed as enabling interconnection or access to UNEs.

As a matter of "the 'ordinary and fair meaning of [the statute's] terms,'"[90] "equipment necessary for interconnection" may easily be read to encompass equipment that has the features and functionalities necessary for interconnection, even though it also has other features and functionalities which are integrated with the interconnection functionality in equipment generally available in the marketplace. In terms of common usage, the situation is no different from an automobile insurance policy stating that the insured will be reimbursed for renting an "automobile necessary for transportation" while the insured's damaged car is being repaired. No one would argue that such a policy precludes rental of an automobile with a radio and air conditioning, or other additional features and functionalities included in automobiles generally available in the market – even though these additional functionalities may not be "necessary for transportation." The automobile itself is "necessary for transportation," and additional features and functionalities do not change that fact. The insured is not required to rent a stripped-down Yugo.

The automobile market has developed enormously in terms of added functionality. While the Model T was limited to the transportation functionality, additional functionalities that were first viewed as novel and not "necessary" have since become accepted features of the "automobile" -- first radios, then air conditioning, now CD players; and in the coming years

[90] *GTE v. FCC*, 205 F.3d at 424, quoting *AT&T Corp. v. Iowa Utilities Board*, 525U.S. 366, 390 (1999),

possibly navigation systems. In the days of the Model T, the phrase "automobile necessary for transportation" would not have included a radio or air conditioning. Now it does.

As technology and the marketplace develop, so does the accepted meaning of terms describing particular equipment that incorporates a technology. "Necessary" must be interpreted in the context of the marketplace and standard industry practices.

The communications technology and market are developing very rapidly. In 1996, for example, a typical Class 5 Switch was approximately 100 times the size of a typical ATM or modern "soft" switch; in 1996, a switch required a separate room, while now several modern switches can fit comfortably within the space of a typical 10ft x 10ft collocation cage. With developing technologies, integration of functionalities that was impossible in 1996 is now totally practical. One of the principal purposes of the Telecommunications Act of 1996 was "to accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services to all Americans."[91] In light of this purpose, there is no reason to believe that Congress intended to freeze the implementation of "equipment necessary for interconnection" at the level of the technology available in 1996, precluding collocation of subsequently-developed multi-functional technology. Therefore, it is reasonable to interpret Section 251(b)(6) as permitting collocation of a wide range of telecommunications equipment that performs many functions in addition to enabling interconnection and access to UNEs.

[91] Sen. Rept. No. 104-230, 104th Cong. 1st Sess. (March 30, 1995) at pp. 1-2.

It is worth noting that Courts in analogous areas have already sanctioned and employed a definition of "necessary" that is considerably more liberal than "indispensable." For example, in the context of state-mandated taking of private property, the term "necessary" has been accorded a broad definition. The present case is similar to *National Railroad Passenger Corp* in which the issue was whether the Interstate Commerce Commission had authority to condemn a 55-mile segment of track in Vermont for the use of Amtrak, under a statute authorizing condemnation of property "required for intercity rail passenger service."[92] The Court of Appeals had set aside the condemnation, on the ground that a lesser action would have sufficed.[93] The Court of Appeals' interpretation limited the condemnation authority "to property that was necessary, in the sense of indispensable, to Amtrak's operations."[94] The Supreme Court reversed, according deference to the ICC's interpretation that "'required' can also mean 'useful or appropriate,'" concluding that "Amtrak can find that an acquisition is required when it is a useful and appropriate way to accomplish its goals."[95] Following the Supreme Court's decision, a federal district court in Massachusetts held that Amtrak's authority to condemn land "necessary for intercity rail

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92 *National Railroad Passenger Corp. v. Boston and Maine Corp.*, 503 U.S. 407 (1992).

93 *Boston and Maine Corp. v. I.C.C.*, 911 F.2d 743, 750 (D.C. Cir. 1990).

94 *National Railroad Passenger Corp.*, *supra*, 503 U.S. at 417.

95 *Id.*, 503 U.S. at 418, 419

passenger transportation" also applies whenever the condemnation is "a useful and appropriate way to accomplish [Amtrak's transportation] goals."[96]

These decisions are in accord with the definition of "necessary" in *Black's Law Dictionary* (6th ed. 1990), which states that "[i]n eminent domain proceedings, it means land reasonably requisite and proper for accomplishment of [the] end in view, not absolute necessity of particular location."[97]

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[96] *National Railroad Passenger Corp. v. 4945 Square Feet of Land*, 1 F. Supp.2d 79, 82 (D.Mass. 1998). *See also, Greyhound Corp. v. Carter*, 124 So.2d 9, 10 (Fla. 1960) ("' necessity' as used in statute . . . does not mean an absolute and indispensable necessity, but rather that proposed service is reasonably necessary to meet the public needs"); *Railway Express Agency, Inc. v. Alabama Public Service Commission*, 91 So.2d 489 (Alabama 1956); *Pennsylvania Railroad Co. v. Pennsylvania PUC*, 124 A.2d 685 (Pa. 1956) (same); *Texas Eastern Transmission Corp.*, 14 FPC 38, 49 (1955) ("We do not view the term [public convenience and necessity] as meaning indispensability.").

[97] Black's also points out other contexts in which "necessary" has a broad meaning.

Similarly here, it is "reasonably requisite and proper for accomplishment of the end in view" for a CLEC to interconnect and access UNEs by any equipment that is generally available and is capable of those uses. The ILECs' probable position that "necessary" means "indispensable," like the similar contention made by Amtrak's opponents, must be rejected.[98]

2. Collocation of Multifunctional Equipment Is "Necessary" As a Matter of Practicality and Economics

Apart from the fact that so-called multifunction equipment may be collocated notwithstanding its other functions as long as it enables interconnection and access to UNEs, collocation of such equipment is also "necessary" because the inability to collocate such

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For example, "[w]ith respect to taxation (*i.e.*, deduction of necessary expenses in carrying on trade or business), [it] means appropriate and helpful in furthering the taxpayer's business or income producing activity." *Id.*

[98] Of course, there is no merit to any ILEC suggestion that physical collocation of CLEC equipment in ILEC central offices results in any "taking" of ILEC property without just compensation in violation of the 5th Amendment.

equipment would impose economic and practical barriers that could effectively thwart CLECs' ability to compete. The CLEC would have to run lines from the ILEC Central Office to its own switch site. The costs for this alone could be substantial. In addition, it would be necessary for the CLEC to obtain space for the multifunction equipment. And, this is on top of collocation space in the ILEC central office which would be necessary for interconnection and access to UNEs. When these costs are multiplied by the many times in which they would be incurred in order to use multifunction equipment to provide service, it is apparent that collocation of such equipment is necessary in order for CLECs to be able to effectively compete. This is especially true for less populated and rural areas. Accordingly, the Commission should conclude that collocation of multifunction equipment is necessary because of the economic and practical barriers to competition that would be created by a separate location of such equipment.

3. Collocation of Multifunction and Stand-Alone Equipment May Be Required As a Reasonable Condition of Collocation

(a) The Commission Has Authority to Prescribe Reasonable Terms and Conditions on Collocation under Section 251.

Section 251(c)(6) requires ILECs to provide physical collocation of equipment necessary for interconnection and access to UNEs "on rates, terms, and conditions that are just and reasonable, and nondiscriminatory . . . ." [99] Pursuant to that section, the Commission may, and should, require that ILECs permit collocation of multifunction equipment and some stand-alone equipment as a reasonable condition of providing collocation generally. Thus, the Commission may define the "reasonable conditions" pursuant to which ILECs must offer physical collocation.[100]

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[99] *Id.*

[100] *In re Trans Alaska Pipeline Rate Cases*, 436 U.S. 631, 653 (1978).

In *GTE v. FCC*, the court stated that "[t]he statute requires only that LECs reasonably provide space for 'physical collocation of equipment necessary for interconnection or access to unbundled elements at the premises of the local exchange carrier,' nothing more."[101] However, the court was merely defining the equipment for which incumbents are required to provide collocation space. Once equipment is determined to be *necessary* for interconnection or access to UNEs – and thus subject to collocation on incumbent premises – the statute explicitly imposes the *additional* requirement that the terms and conditions of such collocation be "reasonable" and "nondiscriminatory."[102] Indeed, once collocation is deemed necessary for interconnection and access to UNEs under Section 251(c)(6), the requirement that the incumbent offer collocation on "reasonable" and "nondiscriminatory" terms and conditions applies *a* fortiori. Where the ILEC itself is deploying multifunctional equipment, a refusal to allow CLECs to deploy equipment with similar functions would not pass the nondiscrimination test.

(b) Requiring Collocation of Multifunctional Equipment Is A Reasonable Condition

As explained, not allowing collocation of multifunction equipment would astronomically increase CLECs' costs of providing competitive services, especially in smaller and rural markets, because of the need to obtain separate space and communications links to backhaul traffic from

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101 *GTE v. FCC*, 205 F.3d at 423.

102 47 U.S.C. § 251(c)(6).

the ILEC central office. This would also substantially delay the ability of CLECs to enter markets and will hinder the ability of carriers to bridge the digital divide.

At the same time, however, allowing collocation of multifunction and stand -alone telecommunications equipment would not increase the space occupied in ILEC central offices at all, or only marginally so. In fact, with the increasing efficiency and compactness of telecommunications equipment, collocation of many types of equipment requires little more than a refrigerator size space. Many CLECs have already built and paid for collocation space frequently at exorbitant prices. Simply stated, therefore, it is reasonable to permit CLECs to collocate multifunctional equipment because it would greatly facilitate their ability to compete and would not have any significant impact on ILECs' central office space.

D. ILECs Must Offer, and Permit CLECs to Self-Provision, Cross-Connection Between Collocators in ILEC Central Offices

1. ILECs Must Offer Cross-Connection as a UNE

The Commission's rules currently define interoffice transmission facility UNEs as including:

> [d]edicated transport, defined as incumbent LEC transmission facilities, including all technically feasible capacity-related services including, but not limited to, DS1, DS3 and OCn levels, dedicated to a particular customer or carrier, that provide telecommunications between wire centers owned by incumbent LECs or requesting telecommunications carriers, or between switches owned by incumbent LECs or requesting telecommunications carriers.[103]

[103] 47 C.F.R. Section 51.319(d)(1)(A).

Allegiance requests that the Commission issue an interpretive ruling as part of this proceeding that interoffice transmission UNEs include transmission facilities between collocated CLECs in ILEC central offices. While not explicitly covered by the current rule, such cross-connection is functionally identical to interoffice transmission facilities between CLEC wire centers. In fact, CLEC collocation space should be considered a wire center for purposes of the foregoing rule.

To the extent necessary, and if the Commission does not issue an interpretative ruling that CLEC/CLEC cross-connection is within the scope of the current rule, the Commission should designate this cross-connection as a new UNE. In this connection, this UNE would meet the "impair" test for the same reasons that interoffice transport meets that test - it is not practically or economically feasible for CLECs to construct or to obtain interoffice transmission facilities from sources other than the ILEC with the same price, quality, and ubiquity. Of course, this circumstance is all the more compelling if CLECs are not permitted to self-provision cross-connection - if they cannot self-provision cross-connection, they must obtain it from the ILEC.

It is also worth noting that provision of cross-connection as a UNE is not in any way subject to the "necessary" standard under Section 251(c)(6) because it is not collocation. Rather, it is provision of a UNE and if CLECs' ability to provide service is impaired by the unavailability of cross-connection as a UNE, ILECs must provide it.

If the Commission establishes cross-connection as a UNE, either by an interpretative ruling or designation of a new UNE, the Commission should also require that prices for these

UNEs reflect the much shorter distances involved than interoffice transport generally and that prices reflect the trivial costs incurred by the ILEC, frequently no more than running a cable a few feet. ILECs should not be permitted to apply to cross-connection rate structures that set a minimum price based, for example, on 1000 feet or less. This would result in exorbitant prices for provision of cross-connection as a UNE in view of the much shorter distances involved.

2. CLECs May Self-Provision Cross-Connection

(a) Section 251(c)(6) Applies to Interconnection Between CLECs on ILEC Premises.

The Commission should determine that the 251(c)(6) requirement that ILECs' provide physical collocation of equipment "necessary for interconnection . . . at the premises of the local exchange carrier" may be read as a matter of "the 'ordinary and fair meaning of [the statute's] terms,'"[104] to include interconnection with other CLECs' networks as well as the ILECs' network provided the other CLECs have interconnection points "at the premises of the local exchange carrier." Under the literal definition of the statutory language, cross-connection is "interconnection . . . at the premises of the local exchange carrier." ILECs will undoubtedly argue that the intended meaning of the statute is to provide for collocation of equipment necessary for interconnection to the ILECs' network only. Nothing in the legislative history supports that argument.

[104] *GTE v. FCC, supra*, 205 F.3d at 424.

Requiring ILECs to permit CLEC cross-connection under section 251(c)(6) is also consistent with the structure of the statute. Section 251(a) requires all carriers – including the CLECs – to interconnect with other carriers. Moreover, as discussed, section 251(c)(6) requires any conditions imposed on interconnection to be "nondiscriminatory." Denial of cross-connection would violate the requirement that ILECs provide collocation on a nondiscriminatory basis because the ILEC could connect with a collocating CLEC at the ILEC's central office, but another CLEC could not. Cross-connection is necessary to put each collocating CLEC in a position to achieve the same interconnection with other CLECs as the ILEC itself is. Even if "interconnection" were defined narrowly to encompass only interconnection with the ILECs' network, any condition denying cross-connection would violate the statute's prohibition against "nondiscriminatory" conditions. The result is the same: under section 251(c)(6), the ILECs cannot refuse cross-connection to any collocating CLEC. Any contrary rule would violate one of the basic purposes of the Act – and of section 251(c)(6) – to provide CLECs "nondiscriminatory access."[105]

(b) Cross-Connection Is a Reasonable Condition of Collocation.

For the same general reasons that permitting collocation of multifunctional equipment is a reasonable condition of collocation of necessary equipment (assuming that multifunction equipment does not independently meet the necessary test), the Commission should also require

[105] House Rept. No. 104-204, supra, at p. 73.

ILECs to permit CLECs to self-provision cross-connection with other CLECs as a reasonable condition of offering collocation.

Self-provisioned cross-connection is vital to CLECs' ability to compete. While availability of cross-connection as a UNE is useful option, and absolutely necessary if CLECs cannot self-provision collocation, self-provisioning collocation will avoid the expense and delay of obtaining it from the ILEC. Of particular concern is that the inability to directly cross-connect would prevent CLECs from utilizing the most advanced cross-connection capabilities. For example, Allegiance does not believe that adequate quality optical cross-connect services are available from ILECs at capacities beyond OC-48 levels, such as OC-192 and even OC-768 levels. In addition, where available, using ILEC optical cross-connects can reduce performance, because a so-called optical-electrical-optical translation must occur. Use of ILEC hardware for optical cross-connection also raises equipment compatibility issues that will further limit technology choice and likely decrease a CLEC's ability to deploy the most modern and advanced solutions available today. Use of ILEC hardware also reduces circuit reliability because additional electronic hardware will be placed in the circuit. In contrast, direct self-provisioned cross-connection between CLECs does not raise any of these issues and consumers will reap the benefits through increased competitive choices.

At the same time, permitting CLECs to self-provision cross-connection in ILEC central offices will not significantly increase occupation of ILEC premises or other burdens on ILECs. In many cases, cabling can be run between adjacent collocation cages or equipment racks. In other

situations where cabling must be run for any distance between CLECs' collocation space it is not likely that this would increase any burdens on ILECs because central offices by their very nature are set up for running cabling and performing interconnection. In any event, to the extent necessary the Commission could establish reasonable limits on the extent to which CLECs may self-provision cross-connection such as requiring that only technically qualified personnel perform this work. It is not required under the statute for the Commission to ban CLEC self-provisioned cross-connection. Instead, for the reasons discussed above, the Commission may, and should, require ILECs to permit CLECs to self-provision cross-connection as a reasonable condition of offering collocation of equipment that enables interconnection or access to UNEs.

D. The Commission Should Reestablish Reasonable General Collocation Provisioning Standards.

The Commission can take several steps to help assure parity of access to ILEC central offices in accordance with the requirement that ILECs provide nondiscriminatory physical collocation. The Commission can start by re-adopting the collocation requirements in ¶ 42 of the *Collocation Order*, which the court vacated based on its finding that the Commission had provided insufficient justification for such requirements under the statute. First, the Commission should reinstate the requirement that CLECs be permitted "to collocate in any unused space in the incumbent LEC premises." *Id*. Allegiance does not believe that the Commission intended – in originally imposing this requirement – to place arbitrary authority in the hands of the CLEC regarding where to collocate. To dispel this impression, the Commission should clarify that such

a requirement is intended to prevent the *incumbent LEC* from unilaterally placing arbitrary restrictions that would prevent collocation of CLEC equipment while preserving the space for future use by the incumbent. The Commission could further clarify this requirement so as to allow the incumbent LEC to place "just and reasonable" restrictions on the use of space for collocation, but the Commission should require the incumbent to provide written certification that it will itself not make use of such space similar to that requested by the CLEC. The Commission should make clear that such requirements are necessary to place the CLEC on the same competitive footing as the incumbent.

Second, the Commission should reinstate its prohibition on the incumbent LEC's unilaterally imposing an arbitrary or unreasonable requirement that the CLEC construct a room, cage, or similar structure for its equipment, collocate equipment on a separate floor, or create a separate entrance to its collocation space.[106] Such separation requirements go beyond increasing the costs borne by CLECs; they constitute clear barriers to entry not faced by the incumbent. For example, a requirement that CLECs collocate on separate floors or in separate rooms reduces the

[106] ILECs frequently justify separate room/isolated space requirement based on "security" concerns. However, the cost of resolving security concerns should not be placed solely at the feet of the CLECs, but should also be shared by the incumbent LECs. Moreover, State commissions have found less restrictive ways to address the purported ILEC security concerns, such as security cameras, monitoring systems, or badges. *Ordinary Tariff Filing of New York Telephone Company to Provide for the introduction of Cageless Collocation Open Environment (CCOE); rates and regulations for Adjacent Structures; and, clarifications and modifications to existing collocation offerings,* Case 99-C-0715, and consolidated case 95-C-0657, Order Directing Tariff Revisions at pp. 4-5 (NY PSC 1999).

universe of space available to CLECs, while leaving the incumbent LEC free to locate its equipment anywhere.[107] Requiring CLECs to construct separate entrances, leaving ILECs free to use existing entrances, increases costs for CLECs while immunizing incumbent LECs from such costs. The Commission should require the incumbent LEC to certify in writing that the creation of separate rooms, cages, or construction of separate entrance is necessary for purposes of reasonable safety, engineering, security or some other technical consideration *that cannot be achieved through a less restrictive alternative*.

[107] For instance, in New York, Bell Atlantic unilaterally imposed a requirement that CLECs place their equipment in a separate lineup at least 10 feet away from working BA-NY equipment. CLECs argued that this rule limits the amount of space available, increases costs and may force CLECs to collocate in a separate room. The NY PSC agreed and disallowed this practice. *Id.*

Finally, the Commission should specifically prohibit incumbent LECs from establishing intermediate points of interconnection in lieu of direct connection to its network facilities. Here, the Commission can rely *both* on the technical feasibility of such direct connection and the incumbent LEC's obligation to provide collocation on just and reasonable and nondiscriminatory terms and conditions. Under the terms of the Act, incumbent LECs are obligated to provide interconnection "at any technically feasible point within the carrier's network."[108] This requirement, by definition, precludes a requirement of indirect interconnection in circumstances where direct connection is feasible. Moreover, unless justified by technical, operational, safety, engineering or security considerations, such a requirement places the CLEC at less than competitive parity with the incumbent LEC, thus violating the incumbent's obligation to offer interconnection at just and reasonable and nondiscriminatory terms and conditions. Accordingly, the Commission should prohibit ILECs from requiring *indirect* interconnection unless the incumbent LEC certifies in writing that it cannot overcome the conditions that mandate such requirement.

[108] 47 U.S.C. § 251(c)(2)(B).

E. The Commission Should Establish Minimum Provisioning Intervals For All Types of Collocation Arrangements.

The FCC has also requested comment on: (1) whether it should reduce the maximum provisioning interval for physical collocation arrangements to a period shorter than 90 days; and (2) whether it should establish separate minimum installation intervals for various other types of collocation.

Allegiance applauds the decision of the Commission to adopt a maximum provisioning interval for physical collocation of 90 days. However, as the incumbent LECs have gained more experience with collocating CLEC equipment, and in installing equipment used to provide advanced services both for themselves and their tenant CLECs, shorter intervals are feasible. The Commission should adopt considerably *shorter* intervals where collocation necessitates *less* than the full complement of activities necessary for LECs to provision a full blown collocation application – *i.e.*, for modifications or additions to existing collocations, collocations within already prepared or conditioned space, or where the CLEC agrees to perform the work necessary to install a collocation cage.

Allegiance urges the Commission to adopt a considerably shorter interval for augmenting existing collocation space, which is frequently necessary to enable a CLEC to install equipment associated with advanced services, such as splitters and cabling. Such collocation typically involves attaching equipment to existing structures with a few bolts and the attachment of pre-prepared cables. Acknowledging that such collocation necessarily involves less planning and

logistical issues, Verizon has reduced the information required for applications for collocation augments by two-thirds. This reduction in paperwork – with its implications for the reduction in administrative tasks – should correspond to a shorter provisioning interval, especially when taken together with the decreased physical work required for collocation augments. Thus, for example, the Texas Commission has affirmed GTE's obligation to provide collocation augments within 30 calendar days, which time frame SWBT already has specified in its collocation tariff.[109] Less generous, but still shorter than the 90 day interval for full collocation, is the 45-business day interval adopted by the Pennsylvania Commission for collocation arrangements.[110] Allegiance believes that 30 days is a suitable interval for augmenting collocation space.

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[109] *See* Docket No. 22168, *Petition of Covad Communications Co. and Rhythms Links, Inc. Against Southwestern Bell Telephone Co. and GTE Southwest Inc, etc.*, Interim Award, at 25.

[110] The PA ALJ recommended a 30 day interval for cable and splitter augments. The PA PUC increased the interval on an interim basis to 45 days but reaffirmed the principle that the time involved should be less than that associated with a new collocation site and stating that it may shorten the interval after a more developed record is produced. *Petition of Covad Communications Company for an Arbitration Award Against Bell Atlantic-Pennsylvania, Inc, Implementing the Line Sharing Unbundled Network Element; Petition of Rhythms Links, Inc., for an Expedited Arbitration Award Implementing Line Sharing*, Docket Nos. A-310696F0002 and

A-310698F09002, Opinion and Order at p. 23 (PA PUC, August 17, 2000).

Allegiance also urges that the Commission establish a 30 day interval for provision of cageless collocation, virtual collocation, and collocation at remote terminals. The Commission should permit states to establish shorter intervals.

IV. COLLOCATION AT REMOTE TERMINALS

A. Collocation At Remote Terminals of Line Cards, DSLAMS, and other Equipment Is Necessary for Interconnection and Access to UNEs.

As the use of fiber-based DLC systems becomes more ubiquitous due to the accelerating growth in the provision of advanced services, remote terminals are fast becoming the equivalent of the central office.[111] The Commission has already recognized the status of remote terminals as essential aggregation points for access to loops and other essential network facilities.[112] Therefore, ILECs must be required to provide CLECs that want more access to remote terminals at least the same access there as they have today to central offices, opening access to an increasingly clear-cut bottleneck facility.

The critical role of the remote terminal in facilitating the provision of advanced telecommunications services cannot be overstated. Traditionally, with first generation xDSL

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111 *UNE Remand Order* at 218.

112 *Id*.

technology, it was assumed that the customer must reside within 18,000 feet of the Digital Subscriber Line Access Multiplexer ("DSLAM") to receive reliable xDSL service. However, placing next generation DLC or IDLC equipment in forward-deployed remote terminals overcomes this operational roadblock, allowing local exchange companies to push deeper into its neighborhoods and install or upgrade neighborhood broadband gateways containing digital electronics. Thus, for example, SBC is on record with respect to its Project Pronto initiative for its claim that:

> SBC has two primary goals: to bring advanced broadband data services to nearly all customers, and to integrate its voice and data networks to more efficiently and effectively transport that traffic. The more than $6 billion Project Pronto initiative should make these goals a reality. The strategy includes plans to:
>
> > Install fiber optics deeper into neighborhood networks and install or upgrade approximately 25,000 neighborhood broadband gateways containing *next generation digital loop carriers*. These neighborhood gateways will expand the reach of DSL service by taking the capabilities of the network closer than ever before to customers.[113]

The strategic assumptions underlying SBC plans have been widely recognized (and emulated) by others in the incumbent LEC industry. In a recent public forum on *Competitive*

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[113] SBC Communications, Inc., *Project Pronto: SBC's Network Vision and Strategy* (November 1999) (emphasis added).

Access to Next-Generation Remote Terminals held at the FCC on May 10, 2000, senior executives from three of the largest regional Bell Operating companies, together with representatives of major switch manufacturers and competitive local exchange companies, all *agreed* in touting the advantages of next generation remote terminals or providing advanced services. Several of the incumbent LEC representatives spoke at length concerning their *current* plans to deploy next generation DLC as an integral part of their independent plans to push fiber deeper into neighborhoods to offer DSL service. Notably, Mr. Masters of SBC expanded on the company's previous boasts made on behalf of Project Pronto, stating that:

> we have a very large initiative going on to try to put a lot more remote terminals in our network. . . . . We said earlier we have about 35,000 remote terminals, and they were adding another roughly 13,000. *We're upgrading 7-10,000 of existing ones to provide a broadband service, next generation DSL, and actually a broadband capability to the network bay.*[114]

Mr. McNamara of Bell-South echoed this sentiment, stating that "*all* of our growth today is going on next generation products. We aren't deploying *any* old technology to DLC any more. It is all next generation products with copper feeder."[115] Accordingly, CLECs must have access to remote terminals.

B. ILECs Must Provide Sufficient Collocation Space at Remote Terminals

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[114] Tr. 12 (emphasis added).

[115] *Id.* at 14 (emphasis added).

In these circumstances, the FCC should adopt regulations to ensure that incumbent LECs have no less an obligation to provide collocation on just and reasonable and nondiscriminatory terms and conditions at remote terminals than they do at central offices.

First, nowhere in Section 251 (c)(6) of the Act is there any suggestion that the duty to "provide physical collocation of equipment necessary for interconnection or access to unbundled network elements," 47 U.S.C.§ 251(c)(6), is limited to central offices. As ILECs move many central office functions to remote terminals, collocation at the remote terminal becomes increasingly "necessary" to achieve interconnection and meaningful access to UNEs. To the extent that any service – that is provided by an incumbent LEC – *cannot* be provided by the CLEC without collocation at the remote terminal, the incumbent LEC must be obligated to provide such collocation. Otherwise, the incumbent LEC cannot possibly satisfy its obligation to provide nondiscriminatory interconnection "that is at least equal in quality to that provided . . . to itself . . . ."[116] Nor can it satisfy its obligation to provide access to UNEs on "just and reasonable" and "nondiscriminatory" terms and conditions.[117]

Under this statutory scheme, collocation at remote terminals is clearly "necessary." Without the ability to collocate DSLAMs, line cards and other equipment at remote terminals, CLECs are essentially denied interconnection with incumbent LEC DLC equipment and access to

[116] 47 U.S.C. § 251(c)(2)(C).

the feeder subloop, thereby limiting xDSL service by CLECs to customers served by spare, home-run copper loops shorter than 18,000 feet.

That ILECs have used the remote terminal as an obstacle to competition cannot be gainsaid. For example, ILECs have sought to reserve space for collocation at remote terminals on the discriminatory pretext that such space is necessary to enable the ILEC to serve future demand. SBC has also sought to impose draconian procedures for Special Construction Arrangements – in essence, recovering additional charges for access to remote terminals that are already recovered in other approved rates. Similarly, in proceedings in Verizon's region, Verizon has taken the position that it need not allow data CLECs to engage in line sharing over DLC loops, contending that, by definition, line sharing can only be done over home-run copper. Verizon has rejected the "plug and play option" advocated by Covad – whereby CLECs collocate line cards in incumbent LEC DSLAMS – as somehow incompatible with the functionality of its own equipment, offering instead to permit adjacent collocation, where CLECs are left to obtain the necessary permits and easements and overcome the aesthetic objections of local homeowners to ubiquitously deployed remote terminal "farms" to the ultimate detriment of end users.

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[117] 47 U.S.C.§ 251(c)(3).

Accordingly, ILECs must be required to provide collocation space at remote terminals, there should be no distinction between current and future collocation space in remote terminals, and pricing should be established in accordance with forward-looking incremental cost principles. In addition, ILECs should not be permitted to use retail and wholesale demand projections as the basis for denying collocation space. An ILEC should be required to provide additional space regardless of its demand forecasts. Otherwise, ILECs can effectively block CLECs from collocating in remote terminals by a combination of undersizing and overforecasting, knowing that CLECs may not be able to construct adequate space at all or in time to compete.[118] ILECs should be required to address space exhaustion in an existing remote terminal by use of a nearby remote terminal and the Commission should make clear that the ILEC should bear the responsibility and cost of resolving all issues relating to easements and land-use restrictions. Moreover, the ILEC should be required to provision the nearby remote terminal within 90 days.

C. Disclosure of Remote Terminal Information Should be Required.

The same pre-application information as to space availability is needed for remote terminals as for central offices. CLECs, particularly those providing advanced services, need to know if there is collocation space available at the remote terminal.

When a CLEC makes a request of an incumbent LEC for collocation space at a remote terminal, the incumbent LEC should, within 10 calendar days, provide it with schematic drawings

[118] As noted, as fiber is deployed in the loop, collocation in remote terminals is becoming as important as collocation in central offices for provision of competitive advanced

of the remote terminal itself and of all adjacent space, as well as information concerning: (1) the amount of collocation space available, and dimensions of any discrete blocks of space; (2) separate identification, through color coding or similar scheme, of the space occupied by the incumbent LEC, by type of equipment; (3) the number of other collocators and space they occupy; (4) any modifications or augments to the space since the last report; (5) plans on the part of the incumbent to make any additional space available (i.e., scheduled growth jobs); (6) level of environmental conditioning, including power capacity, circuit capacity, number of pairs available and any limitations on expansion of pairs; (7) details associated with distribution architecture, including types of facilities and equipment used, e.g., pairgain, DLC, fiber, etc.; (8) methods of loop testing available; and (9) any special equipment with associated costs.

D. ILECs Should Be Required to Deploy Remote Terminals That Support Interconnection By CLECs.

As mentioned above, the remote terminal is becoming the new central office. ILECs must not be permitted to artificially constrain interconnection at remote terminals by using equipment that unnecessarily constrains CLECs' ability to effect interconnection there. Thus, ILECs should be required to take steps to ensure that the equipment they deploy to interface with CLEC equipment should be outfitted with universal interfaces and protocols so as to enable efficient interconnection on just and reasonable and nondiscriminatory terms and conditions.

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V. THE COMMISSION SHOULD MODIFY ITS RULES TO FACILITATE LINE SHARING

A. Splitter Collocation

When promulgating its rules on line sharing, the Commission operated under the premise that the ILECs would desire to maintain control over the splitter functionality.[119] Such control presupposes that ILECs would own the splitter and provide the splitter functionality to the CLEC. ILECs, however, have been asserting that they have no obligation to provide CLECs with splitter functionality, and that its current offerings of splitter functionality are purely "voluntary."[120] For those CLECs utilizing line sharing who desire not to have their access to high frequency portion of the loop subject to the whims of the ILECs and their "voluntary" offerings, ownership of the splitter will be the only feasible option. Thus, their ability to collocate the splitters will become a very central aspect of their ability to line share. For this reason, this Commission needs to establish line-sharing specific collocation rules that will ensure that CLECs will be able to

[119] *Line Sharing Order* at ¶ 76.

[120] *Illinois Line Sharing Order* at p. 6.

collocate equipment, including the splitter, that will give the CLEC access to the full features, functions, and capabilities of the high-frequency portion of the loop.

The splitter plays an essential role in the ability of a line-sharing CLEC to access the high frequency portion of the loop. The capability to provide both voice and data traffic over the loop has necessitated, at least for the time being, that the voice and data transmissions be "split" with the voice traffic being directed to the circuit-switched network and data traffic being directed to the packet-switched network.[121] Thus, where a line carries both POTS and data channels, the carrier must separate these two streams.[122] This is done through use of the splitter which separates the high frequency, xDSL signals, from low frequency (voiceband) analog signals.[123] The DSLAM then routes the traffic to the particular network.[124] Without the splitter functionality, there would be no way for the line sharing CLEC to access the traffic. Thus, as a threshold matter, the equipment that provides the splitter functionality is "necessary" for access to the line sharing UNE and, thus, allowed to be collocated under Section 251(c)(6).

The Commission, however, must not limit itself to simply stating that a carrier should be allowed to collocate equipment with a splitter functionality in the remote terminal and/or central

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121 *Line Sharing Order* at ¶ 8. In the future, it is anticipated that voice traffic will be migrate to a packet-switched network.

122 *Line Sharing Order* at ¶ 9.

123 *Id.*

124 *Id*. In some cases, the splitter and DSLAM are integrated in the same equipment.

office. The Commission needs to implement collocation rules that will give CLECs flexibility in regard to what types of equipment they may collocate and where this equipment may be located. Such rules are needed to give CLECs access to the full "features, functions and capabilities" of the high-frequency portion of the loop on a competitive parity basis with the ILEC and/or its advanced services affiliate.

B. Multi-functional Equipment

As demonstrated throughout these Comments, telecommunications equipment is becoming much more integrated. The Commission has already noted that today's equipment is capable of integrating the splitter and DSLAM functionality. Cards are being developed that will combine the DSL functionality, DSLAM functionality, and splitter functionality.[125] The Commission, when defining its collocation rules in regard to line sharing, needs to provide for rules that will encompass technological developments in equipment.

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125 *PA ALJ Line Sharing Order* at p. 36.

The Commission has determined that it should not mandate a particular technological approach to the use of a line for multiple services.[126] The Commission has also held that when the ILEC maintains control of the splitter, it must promptly accommodate, "in response to a competitive CLEC request to do so, any line sharing technology that meets the deployment criteria established in this proceeding."[127] Thus, CLECs should be given flexibility to collocate equipment for line sharing as long as that equipment is utilized for the purposes of accessing the "functions, features, and capabilities" of the high-frequency portion of the loop and meets the deployment criteria in this proceeding.

C. Location of Equipment

CLECs need to be given a flexible menu of configurations for the location of the splitter equipment. Specifically, ILECs should be required to provide the following menu of configurations: (1) an ILEC owned splitter located on the main distribution frame ("MDF"); (2) an ILEC or CLEC owned splitter located as close to the DS0 terminations or the MDF as

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126 *Line Sharing Order* at ¶ 26.

127 *Id.* at ¶ 77.

possible; and (3) a CLEC-owned splitter in the CLEC's physical collocation arrangement. CLECs have been experiencing difficulty getting flexibility in the configuration options.[128] In particular, CLECs have been experiencing difficulty in locating the splitter at, or near, the main distribution frame.

[128] For instance, Verizon refuses to own the splitter. *See PA ALJ Order* at p. 20. Ameritech also declines to own the splitter and will only offer a CLEC owned splitter to be located in either the CLEC's physical collocation arrangement or in a common area which is frequently not near the DS0 terminations or the frame. *IL Line Sharing Order* at p. 7.

This Commission has recognized the importance of having splitters near the main distribution frame to prevent signal attenuation.[129] Unless CLECs are allowed to have the splitter at or near the MDF, they incur needless costs for extra cross-connects and tie cables. For instance, locating the splitter at or near the MDF would only require the use of two cross-connects and one tie cable.[130] The configurations offered by ILECs would require the use of many more cross-connects and tie cables.[131] This unnecessarily inflates the costs CLECs must incur to utilize splitter functionality, particularly when the ILEC refuses to provide the splitter. The inefficient configurations also heighten the risk of service failures attendant with use of excessive tie cables and cross-connects.[132] Finally, the inefficient ILEC configurations increase

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129 The further the splitter is from the MDF, the more likely the signal will experience some attenuation. *Line Sharing Order* at ¶ 79.

130 *IL Line Sharing Order* at p. 10.

131 For instance, Ameritech's proposed configuration would require CLECs to use three extra cross-connects and three extra tie cables. *Id.*

132 *Id.*

the length of cable that carries the DSL signal from a customer's premises to a CLEC's DSLAM. In certain multi-storied COs, if the splitter configuration added 500 to 1,000 feet to the overall length of the cable, it may preclude the CLECs ability to offer xDSL service to some customers served by that CO since DSL is a distance sensitive technology.[133]

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133 *Id.*

These ILEC-proposed configurations for the splitter disadvantage the CLEC vis-à-vis the ILEC, or its affiliate, in that ILECs are increasingly using integrated splitter/DSLAM equipment that does not require excessive cross-connects and tie cables. This coupled with the fact that some ILECs are allowing their affiliates to line share over the fiber DLC loops while denying CLECs this opportunity exacerbates the competitive disadvantage CLECs face.[134] CLECs need to be provided with a menu of configuration options for the splitter such that it matches the network efficiencies ILECs or their affiliates are able to utilize in the provision of advanced services. Otherwise, CLECs will not be able to offer advanced services at parity with the ILEC or its affiliate given the increased costs effected by the inefficient splitter configuration and the possible loss of customers due to distance limitations.

D. Provisioning Intervals for Collocation Augments for Line Sharing

134 *Id.* at 31.

The Commission should establish a provisioning interval for splitter and cable augments of 30 days. In such a situation, CLECs are seeking the augmentation of an existing collocation site, not the construction of a new one. The augment required for the provisioning of line sharing is generally the connection of cables from the CLEC collocation arrangement to the ILEC mainframe or splitter location.[135] The actual physical work involved includes only the running of one or several cables and should not take more than one or two days.[136] This is in contrast to constructing a new site which is more complex since it requires space planning, power provided to the site and the installation of racks, shelves and relay racks.[137] There is no reason to subject collocation augments for line sharing to the longer interval utilized for constructing new sites. State commissions have determined that thirty days is sufficient to provide the cable and splitter augments to facilitate line sharing.[138] Short provisioning intervals for cable and splitter augments

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135 *PA ALJ Order* at p. 16.

136 *Id.*

137 *Id.* at p. 16.

138 *Id.* at p. 17. The Texas PUC has established a 30 day interval for cable augments. [Cite to TX PUC Interim Line Sharing Order.] The PA ALJ recommended a 30 day interval for cable and splitter augments for line sharing. The PA PUC increased the interval on an interim basis to 45 days but reaffirmed the principle that the time involved should be less than that associated with a new collocation site and stating that it may shorten the interval after a more developed record is produced. *Petition of Covad Communications Company for an Arbitration Award Against Bell Atlantic-Pennsylvania, Inc, Implementing the Line Sharing Unbundled Network Element; Petition of Rhythms Links, Inc., for an Expedited Arbitration Award Implementing Line Sharing*, Docket Nos. A-310696F0002 and A-310698F0002, Opinion and Order at p. 23 (PA PUC, August 17, 2000).

are especially vital when an ILEC refuses to own and manage the splitter capacity, because if the CLEC under-forecasts splitter capacity it will have to endure a 90 day interval to reinforce the capacity.[139] A shorter interval will ultimately benefit end users as they will be able to partake of xDSL service more quickly.

VI. THE COMMISSION SHOULD ESTABLISH A NATIONAL SPACE RESERVATION POLICY

A. The Need for a National Standard

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[139] *Id.* at p. 18.

The Commission clearly recognizes the value and importance of policies regarding the reservation of space in ILEC premises.[140] The Commission has recognized that ILECs have both "the incentive and capability to impede competition by reducing the amount of space available for collocation of competitors."[141] Unchecked ILEC space reservation will limit the amount of available collocation space and inhibit the timely deployment of competitive services, particularly advanced services.[142] Without policies limiting the time frame for reserving space, there is no check on how long ILECs may keep vital collocation space out of the reach of competitors. Pacific Bell, prior to the implementation of a space reservation policy by the California Public Utilities Commission, had an "unlimited" reservation policy for dissimilar equipment, *i.e.*, switching equipment, Main Distribution Frames, and power.[143] SBC has previously argued that

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[140] This section will focus on ILEC space reservation. While CLECs also reserve space, the abuse of space reservation and the anti-competitive effects is more an issue in regard to ILEC space reservation since they exert control over the premises. Any policy that this Commission formulates that allows for ILECs to reserve space should provide the same opportunities to the CLECs to reserve space.

[141] *Collocation Remand NPRM* at ¶ 50, *quoting Advanced Services Report and Order*, 14 FCC Rcd at 4793, ¶ 56.

[142] *Collocation Remand NPRM* at ¶ 50.

[143] *Rulemaking on the Commission's Own Motion to Govern Open Access to Bottleneck Services and Establish a Framework for Network Architecture Development of Dominant Networks*, Decision 98-12-069, 1998 WL 995609, 69 (Ca. PUC 1998). Dissimilar equipment is equipment that will be deployed by the ILEC in the ILEC premises that will not be deployed by the CLEC. Similar equipment is equipment that both the ILEC and CLEC will likely deploy in an ILEC premises, *e.g.*, multiplexers.

space reservation periods of 10 to 20 years would be appropriate for such equipment.[144] Thus, without space reservation policies chunks of valuable potential collocation space could be cordoned off from competitors for years regardless of the true need to reserve such space.[145]

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144 *Collocation Remand NPRM* at ¶ 49, n. 131.

145 The space that is reserved is fully vacant space, and does not cover space that the ILEC may be deeming to be occupied but in actuality is being used to "warehouse" inactive or underutilized equipment. The Washington Utilities and Transportation Commission deemed this "warehousing" practice to be a "de facto reservation of space for future use." *Re MFS Communications Company, Inc.*, Docket Nos. UT-960323, UT-960326, UT-960337, 1998 WL 996190, 10 (WUTC 1998). Thus, usable space is already being foreclosed even before space is "reserved" by the ILEC.

Recognizing this, the Commission "strongly" urged state commissions to adopt space reservation policies. The issue of space reservation cries out for a national standard, however. It is laudable that state commissions in California, Texas, and Washington have implemented such policies. These policies will help ensure that competitors have space to collocate their equipment such that residents of those states may partake of competitive advanced services. In states where such policies have not been implemented, however, ILECs will be able to thwart competition by reserving space indefinitely. A baseline national standard needs to be established such that disparities in the amount of time ILECs may restrict the availability of collocation space will not lead to "inconsistent deployment of advanced services" throughout the U.S.[146] to the detriment of end users.

B. A National Standard is Feasible

The Commission has heretofore declined to implement a national standard for space reservation because it felt that states, given their knowledge of local circumstances, were in a better position to determine whether a carrier has reserved more space than is necessary or is utilizing space reservation policies that is impeding physical collocation.[147] The determination of how long an ILEC should be allowed to reserve space is not one that requires a state-specific or

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146 CC Docket No. 98-147, Reply to Oppositions to Sprint's Petition for Partial Reconsideration and/or Clarification at p. 9 (July 27, 1999)("*Sprint Reply*").

CO-specific determination. Rather in determining what is an appropriate time for space reservation, one must determine what is the time period that best reflects, and balances, the need of ILECs to plan their networks, with that of CLECs' need to collocate their equipment.

The Commission can determine a time frame that would reasonably allow for ILEC network planning and buildout that can apply in Michigan just as well as it would in Georgia. It is quite illuminating that three of the states that have implemented space reservation policies, California, Texas, and Washington, are three of the largest states in the United States, and ones presumably with a large diversity of central office arrangements and space disputes. Yet, these states have implemented space reservation policies that apply in San Luis Obispo as well as Los Angeles; in Austin as well as Dallas. This is in no way intended to mitigate the state PUCs' role in issues of space reservation. State PUCs would be the best entities to apply and police the space reservation policies but the Commission should first establish and implement a national standard to ensure that end users across the country will reap the benefits of increased competition.

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147 *Collocation Remand NPRM*, at ¶ 52.

The record in this proceeding will undeniably demonstrate that telecommunications equipment is becoming smaller and more integrated. For instance, switching, transport, and power equipment are all being integrated in multi-functional equipment that occupies a fraction of the space needed before. Yet, ILECs argue that they need ten years to plan for the orderly growth and expansion of equipment such as main distribution frames and switches and two years for equipment such as multiplexers and fiber optic terminals.[148] Yet, equipment is not expanding, it is contracting, and equipment that used to take up significant amounts of space, such as switches, and main distribution frames are becoming smaller or marginalized.[149] Project Pronto is a demonstration of how evolving technological equipment is becoming smaller and can be rapidly deployed.[150] As this Commission has recognized, remote terminals are becoming the central offices of today, with many of the essential telecommunications functions being moved out to such structures. The quick way in which SBC plans to deploy these remote terminals demonstrates that network planning and expansion requires less time than it did a few years ago.

Thus, there is simply no basis for the excessive time periods ILECs seek to reserve space. The fact that ILECs are continuing to insist on such excessive space reservation time frames

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148 *Sprint Reply* at p. 7.

149 For instance, SBC's Project Pronto architecture utilizes integrated DLC technology that bypasses the main distribution frame altogether. *IL Line Sharing Order* at p. 11.

150 As part of Project Pronto, SBC will "install or upgrade approximately 25,000 neighborhood broadband gateways containing next-generation digital loop carriers." SBC Communications, Inc., *Project Pronto: SBC's Network Vision and Strategy* (November 1999).

demonstrates that ILECs are not basing these policies on the realities of the market, but on their desire to leverage their control of available collocation space. The Commission has taken a wonderful first step in recognizing the way in which ILEC space reservation plans can impede competition and the need for the policies to check such plans. The Commission needs to take the next step and implement a national, uniform policy that will limit these space reservation plans. A period of a year would be sufficient to give carriers an opportunity to engage in network planning. In the evolving telecommunications market, any period longer than a year is not needed and will exclude valuable space that can be used in ILEC premises.[151]

In addition, the Commission's focus needs to shift from allowing ILECs to reserve space to encouraging ILECs to utilize configurations and equipment that will enhance available space and allow for more carriers to be able to collocate. Rather than allowing ILECs to have the ability to reserve space for indefinite periods, policies should be implemented that will place on ILECs an affirmative obligation to ensure space is available both in the central office and remote terminals. Technology is providing ways to address the space limitation issues that have inhibited

[151] The time frame should not be equipment-specific, *i.e.*, the similar/dissimilar distinction should be eliminated. Technology is integrating equipment and blurring old definitional lines. There is no need for a longer time frame for equipment such as switches.

the development of competition to date. These developments should not be undercut by ILEC practices that will limit space in the future.

A classic example of this is how SBC has committed to making more collocation space available in remote terminals it deploys after September 15, 2000.[152] This shows that ILECs do have capabilities to plan their networks not only to meet their needs, but to provide for space to effectuate non-discriminatory access to their premises. It also suggests that up to this point, SBC was not providing for such space in its remote terminals given the lack of collocation space at the existing terminals. The Commission needs to implement policies that transforms the focus of network planning from unnecessarily reserving existing space in premises to encouraging the provision of more space in these premises. The focus has to switch from space reservation to

[152] *In the Matter of Ameritech Corp., Transferor, and SBC Communications, Inc., Transferee, for Consent to Transfer Control of Corporations Holding Commission Licenses and Lines Pursuant to Sections 214 and 310(d) of the Communications Act and Parts 5, 22, 24, 25, 63, 90, 95, and 101 of the Commission's Rules*, CC Docket No. 98-141, ASD File No. 99-49, Second Memorandum Opinion and Order, ¶ 34 (Sept. 8, 2000)("*Project Pronto Order*").

space enhancement.

VII. CONCLUSION

For these reasons, the Commission should adopt the requirements and policies requested by Allegiance.

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